WHAT IS CLAIMED IS:

1. A sample mount for an evaporator, comprising:

(a) a sample mounting base;

(b) a conductive heater block comprising an thermally conductive material; and

(c) a conductive heater positioned in a cavity in the conductive heater block.

2. The sample mount of Claim 1, wherein the sample mounting base and conductive heater block are of one-piece construction.

3. The sample mount of Claim 1, wherein the thermally conductive material in the conductive heater block has a coefficient of thermal conductivity of at least about 40 W/m°K.

4. The sample mount of Claim 1, wherein the thermally conductive material includes one or more of copper and alloys thereof, steel, tungsten, beryllium oxide, iron, and aluminum.

5. The sample mount of Claim 1, wherein the conductive heater block includes a full cut extending from a surface of the block to the cavity to permit first and second portions of the block positioned on either side of the full cut to clamp the conductive heater.

6. The sample mount of Claim 5, wherein the conductive heater block includes a partial cut extending from a surface of the block towards the cavity to permit the first and second portions of the block to clamp the conductive heater and wherein the block has a yield strength of no more than about 200 MPa.

7. The sample mount of Claim 6, wherein the full and partial cuts are parallel to one another and extend the length of the block.

8. The sample mount of Claim 6, wherein the partial cut has a depth and the depth of the partial cut is such that the material thickness between the conductive heater and the partial cut ranges from about 0.030 inch to about 0.060 inch.

9. The sample mount of Claim 5, wherein the full cut and partial cut are on adjacent surfaces of the block.

10. The sample mount of Claim 1, wherein the cavity is cylindrical in shape and the axis of symmetry of the cavity is located at a distance from an axis of symmetry of the block.

11. The sample mount of Claim 1, wherein the conductive heater includes an outer metal layer, a ceramic layer located interiorly of the outer metal layer, a metal coil positioned interiorly of the ceramic layer, and an inner ceramic layer located interiorly of the metal coil.

12. The sample mount of Claim 1, wherein the block has a yield strength of at least about 200 MPa and includes an upper part and a lower part that define a cylindrical cavity therebetween, the upper and lower parts being clamped together by one or more connectors to hold the heater in position.

13. A method for operating a thin film deposition system, comprising:

(a) radiantly heating a deposition chamber to a first temperature to vaporize undesirable deposits;

(b) while removing the vaporized undesirable deposits using a vacuum pump to form a decontaminated deposition chamber;

(c) conductively heating a substrate in the decontaminated deposition chamber to a second temperature in order to clean, anneal substrate, or to form a thin film on a substrate on the mount, wherein the first temperature is less than the second temperature.

14. The method of Claim 13, wherein the first temperature ranges from about 100°C to about 300°C.

15. The method of Claim 13, wherein the second temperature ranges from about 100°C to about 1000°C.

16. The method of Claim 13, wherein steps (a) and (b) occur simultaneously.

17. The method of Claim 13, wherein steps (a) and (b) occur before step (c).

18. The method of Claim 13, further comprising before step (c) cooling the chamber to ambient temperature.

19. The method of Claim 13, wherein in steps (a) and (b) a chamber pressure is at least about 10^{-10} Torr.

20. The method of Claim 13, wherein in steps (c) a chamber pressure is no more than about 10^{-3} Torr.

21. The method of Claim 13, wherein a chamber pressure in steps (a) and (b) is at least about 100% more than a chamber pressure in step (c).